PocketSCAT and SpillView: Field Capture Tools for Spill Response

Alain Lamarche Principal EPDS





Pocket SCAT:

- Pocket-PC based tool for recording oiling conditions following the SCAT approach
- Lessons learned from field tests
 - Ontario
 - Nova Scotia



Why

- SCAT field documentation generates a lot of data
- To be used, data needs to be
 - Communicated to planners
 - Entered in computerized treatment systems
- Data transcription takes time and can be the source of error
- Paper data needs to be brought back manually from the field
- Location of oil on hand-drawn sketches
 EPD can be difficult to figure-out

Pocket SCAT - Design

- Pocket-PC: Portable and inexpensive
- Data stored in ACCESS database and ASCII files
- Allows the capture of coordinates from a GPS
- Incorporates all information found in a Shoreline Oiling Summary form
- Can use raster images as basemaps
- Data can be integrated within ShoreAssess



Lessons Learned from Field Tests (1)

- System should be usable without basemaps
 - Managing maps can be an issue Basemaps used in the field need to be prepared and distributed to each Pocket-PC unit
- System will be more efficient if used in combination with pre-segmentation databases



Lessons Learned from Field Tests (2)

- Each organization has its own requirements
 - Pre-segmentation databases
 - Unique shoreline types
 - Different ways of recording access restrictions
 - Different ways of recording resources



Conclusion:

- Prototype did work properly
- However, each organization tested needed its own version
- Modifications will be made to allow the use of the field capture system without basemaps



SPILLVIEW

- Data capture applications for aerial observation of oil
- Developed for the Canadian Coast Guard – derived from an ice observation application



SPILLVIEW - Design

- Tablet PC application
- Directly linked to an aircraft GPS
- Allows capture of slick extent and "crude" observations of oil on shorelines
- Interfaces with ShoreAssess
 - Aerial observations can be used to select shoreline segments from a segmentation database
- Can import summary oiling information from ShoreAssess

